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	ATTORNEY DOCKET NO.	CONFIRMATION NO.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/807,287	04/11/2001	Katsuhiko Hiramatsu	L9289.01129	6026	
7590 • 07/27/2005		EXAMINER			
Stevens Davis Miller & Mosher			DAVIS, CYNTHIA L		
Suite 850 1615 L Street NW			ART UNIT	PAPER NUMBER	
Washington, D	C 20036		2665		

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/807,287	HIRAMATSU, KATSUHIKO				
Office Action Summary	Examiner	Art Unit				
	Cynthia L Davis	2665				
The MAILING DATE of this commun	ication appears on the cover sheet wit	th the correspondence address				
A SHORTENED STATUTORY PERIOD F THE MAILING DATE OF THIS COMMUN  - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this community.  If the period for reply specified above is less than thirty (3)  If NO period for reply is specified above, the maximum is  Failure to reply within the set or extended period for reply Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no event, however, may a remunication. 30) days, a reply within the statutory minimum of thirty tatutory period will apply and will expire SIX (6) MONTY will, by statute, cause the application to become ABA	eply be timely filed  (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).				
Status	•					
1) Responsive to communication(s) file	Responsive to communication(s) filed on 24 May 2005.					
, , ,						
3)⊠ Since this application is in condition	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the pract	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims	·					
4) Claim(s) 9-16 is/are pending in the	application.					
4a) Of the above claim(s) is/a	re withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)☐ Claim(s) is/are rejected.						
7)⊠ Claim(s) <u>10</u> is/are objected to.	Claim(s) <u>10</u> is/are objected to.					
8) Claim(s) are subject to restri	ction and/or election requirement.					
Application Papers						
9) The specification is objected to by the	e Examiner.					
10)⊠ The drawing(s) filed on <u>24 May 2005</u>	10)⊠ The drawing(s) filed on <u>24 May 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
Applicant may not request that any obje	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected t	o by the Examiner. Note the attached	Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul><li>2. Certified copies of the priority</li><li>3. Copies of the certified copies application from the Internation</li></ul>	documents have been received. documents have been received in Aport of the priority documents have been bonal Bureau (PCT Rule 17.2(a)).	oplication No received in this National Stage				
* See the attached detailed Office action	on for a list of the certified copies not i	received.				
Attachment(s)	A) □ 1=1== i= 0	umman (PTO 412)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (I		ummary (PTO-413) )/Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 of Paper No(s)/Mail Date		formal Patent Application (PTO-152)  —·				

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#### **DETAILED ACTION**

1. This application is in condition for allowance except for the following formal matters:

# Claim Objections

2. Claim 10 is objected to because of the following informalities: "of claim 9" in line 1 of the claim should be changed to "of claim 9". Appropriate correction is required.

## Allowable Subject Matter

3. The following is a statement of reasons for the indication of allowable subject matter: in independent claims 9 and 14, the limitation

"a channel estimation value synthesizer that synthesizes the first estimation value, a value obtained from the second estimation value by applying the phase rotation amount estimated in the phase rotation amount estimator to said second estimation value, and the third estimation value so as to calculate a definite channel estimation value"

is not found in the prior art.

4. The following is a statement of reasons for the indication of allowable subject matter: in independent claims 11 and 15, the limitation

"a channel estimation value synthesizer that synthesizes the first estimation value, a value obtained from the second estimation value by applying the amplitude coefficient and the phase rotation amount estimated in the amplitude and phase rotation amount estimator to said second estimation value, and the third estimation value so as to calculate a definite channel estimation value"

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is not found in the prior art.

## Conclusion

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5. Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLD 7/19/2005 <sup>4</sup> My Mory

HUY D. VU SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600